

A. CLASSIFICATION OF SUB-IPC 7 F16K5/06

MATTER

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) F16K IPC 7

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

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US 5 730 420 A (TOW JOHN P) 24 March 1998 (1998-03-24)	23
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column 2, line 25 -column 3, line 12; figures	1,3,4, 7-10, 17-21,
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	6 July 1965 (1965-07-06) column 2, line 38 -column 5, line 52; figures US 5 730 420 A (TOW JOHN P) 24 March 1998 (1998-03-24) column 2, line 35 -column 2, line 43; figures DE 12 02 596 B (WHITEY RESEARCH TOOL CO) 7 October 1965 (1965-10-07) column 2, line 25 -column 3, line 12;

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filling date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed Invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 24 April 2003	Date of malling of the International search report 14/05/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer Lanel, F-B

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